



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/549,469

08/24/2005

Thilo Kraemer

MSA-261

8210

7590
Horst M Kasper
13 Forest Drive
Warren, NJ 07059

09/19/2007

EXAMINER

REIS, TRAVIS M

ART UNIT

PAPER NUMBER

2859

MAIL DATE

DELIVERY MODE

09/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/549,469

Applicant(s)

KRAEMER, THILO

Examiner

Travis M. Reis

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5,7 and 9-24 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5,7,9,10 and 12-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of group I in the reply filed on 5/18/7 is acknowledged.

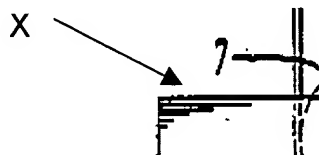
Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2, 7, 9, 10, 12-15, 17-22, & 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruhler (U.S. Patent 4924598) in view of Kaburagi et al. (U.S. Patent 5434602).

With reference to claims 2, 9, 10, 12-15, 19, 20, 22, & 24, Gruhler discloses a device and method of using for measuring the thickness of objects comprising a base (30) from which a column (1) rises vertically with a placement surface for the object (X, see below),



whereby a length-measuring system is arranged along the column comprising a continuously looped belt (5) mounted along the column on a carriage (3) (Figure 1) along a groove/guide (2) & rollers (6,7) (Figures 1 & 10); moved along the column by means of an electric motor (10) (Figure 2), while a projecting arm (4) engages the belt being able to accompany the movement of the belt for making contact with the object to be measured (Figure 1).

Gruhler does not disclose the belt is magnetic and provided with a plurality of pole pitches, with a stationary magnetic field sensor having an electric evaluation circuit on the base.

Kaburagi et al. discloses a recording apparatus with a magnetic linear encoder in the embodiment shown in Figure 60 with a looped scale (733) with pole pitches (col. 28 line 27) sensed by a stationary magnetic sensor (737) and a counting circuit (739) in order to read information on said scale without hindering any other component (col. 28 lines 36-40) and detect the speed and position of the carriage (732) (col. 28 lines 48-50). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the pole pitches, disclosed by Kaburagi et al. to the belt, and add the sensor and counting circuit disclosed by Kaburagi et al. to the base disclosed by Gruhler in order to not only detect that motion is occurring up or downward as Gruhler discloses (col. 6 lines 51-56), but that an absolute position value is known.

With reference to claims 7, 17, & 18, Gruhler does not disclose a tension spring that engages an end of the carriage and the other end engages the base.

Kaburagi et al. discloses a tension spring (746) engaged with the carriage (732) (through connection to the pulleys) in order to take up the scale (733) without slack (Figure 60)(col. 28 lines 33-35). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the tension spring disclosed by Kaburagi et al. to the rollers/carriage disclosed by Gruhler in order to take up the belt without slack.

With reference to claim 21, Gruhler does not disclose the lowest width of the placement area is larger than the smallest diameter of the object; wherein the width of the contact area of the contact arm is larger than the smallest diameter of the object. However, the size of the placement area and contact area, absent any criticality, are only considered to be obvious modifications of the shape of placement area and contact area disclosed by Gruhler as the courts have held that a change in size, without any criticality, is within the level of skill in the art as the particular size claimed by Applicant is nothing more than one of numerous sizes that a

person having ordinary skill in the art will find obvious to provide using routine experimentation based on its suitability for the intended use of the invention. See *In re Rose*, 220 F.2d 459, 463, 105 USPQ 237, 240 (CCPA 1955). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to make the sizes of the placement area and contact area disclosed by Gruhler larger than the smallest diameter of the object being measured in order that the object is held in place securely when measured.

4. Claims 16 & 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruhler & Kaburagi et al. as applied to claims 1-5 & 7-10 above, and further in view of Hassell (U.S. Patent 6185832).

Gruhler & Kaburagi et al. disclose all of the instant claimed invention as stated above in the rejection of claims 1-5 & 7-10, but does not disclose the movement means has teeth into which a drive cog wheel meshes.

Hassell discloses an apparatus (15) for callipering book signatures with a toothed belt (49) and drive cog wheel (50) (Figure 7) for driving movement without slippage and to maintain proper timing (col. 5 lines 1-3). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add teeth to the belt and drive wheel disclosed by Gruhler & Kaburagi et al. in order to drive movement without slippage and to maintain proper timing in measurement.

Response to Arguments

5. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., suited to measure the length of tablets, pills, or oblongs) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

6. In response to applicant's argument that Gruhler is incapable of measuring the length of tablets, pills, oblongs, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

7. In response to applicant's arguments that Grulher does not disclose a placement surface for an object; these arguments have been fully considered but they are not persuasive since an object would be capable of being placed in the area as detailed above in paragraph 3 and engage the contact area of the projecting arm.

8. In response to applicant's argument that there is no suggestion to combine the references (i.e. to add a magnetic pole pitches as taught by Kaburagi et al. to the belt disclosed by Gruhler), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the advantages presented of having absolute position knowledge is sufficient motivation to add the pole pitches and counting means as taught by Kaburagi et al. to the belt disclosed by Gruhler.

9. In response to applicant's arguments against the references individually (i.e. a "fixed carriage belt", one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Art Unit: 2859

10. In response to applicant's arguments that the combination of Gruhler & Kaburagi et al. would result in two pulleys connected by a spring; these arguments have been fully considered but they are not persuasive since what Kaburagi teaches is a spring connection between a stationary object and a movable carriage, through its connection between the pulleys, as detailed above in paragraph 3.

11. In response to applicant's arguments that the proposition of Hassell with the contact of a measurement arm is outside of the instant application or that a person of ordinary skill would provide a three pulley construction to the apparatus disclosed in the present rejection; these arguments have been fully considered but they are not persuasive since Hassell is cited only to teach the features of a toothed belt and cog wheel; the fact Hassell has other features described in the patent is not pertinent to the present rejection, as detailed above in paragraph 4.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Art Unit: 2859

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M. Reis whose telephone number is (571) 272-2249. The examiner can normally be reached on 8--5 M--F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Travis M Reis
Examiner
Art Unit 2859


G. BRADLEY BENNETT
PRIMARY EXAMINER
AV 2859

Diego Gutierrez
Supervisory Patent Examiner
Tech Center 2800

tmr
September 12, 2007

Application/Control Number: 10/549,469
Art Unit: 2859

Page 8